

Title (en)

ROTORY SHAFT SEAL

Publication

EP 0369131 A3 19910109 (DE)

Application

EP 89116819 A 19890912

Priority

DE 3838996 A 19881118

Abstract (en)

[origin: EP0369131A2] A rotary shaft seal, in which a first and a second conical surface (4, 5) converge in the direction of the sealing edge (3). The second conical surface (5) facing the outside air is bounded on the side facing away from the sealing edge (3) by a third conical surface (7) which has a smaller cone angle (A) than the second conical surface (5). Provided in the region of the second and third conical surfaces (5, 7) are return elements (8) for leaking fluid which project radially inwards, are distributed evenly in the circumferential direction, operate hydrodynamically and extend up to the sealing edge (3). Provided between the first conical surface (4) and the sealing edge (3) is an intermediate surface (9) of essentially circular form. The intermediate surface (9) has a width (C) in the radial direction which essentially corresponds to the largest radial extension (D) of the second conical surface (5). <IMAGE>

IPC 1-7

F16J 15/32

IPC 8 full level

F16J 15/32 (2006.01); **F16J 15/3244** (2016.01)

CPC (source: EP)

F16J 15/3244 (2013.01)

Citation (search report)

- [Y] DE 1525882 A1 19700709 - STENSHOLMS FABRIKS AB
- [Y] FR 2188760 A5 19740118 - CHROMEX SA [FR]

Cited by

WO9811366A1

Designated contracting state (EPC)

AT BE DE ES FR GB IT SE

DOCDB simple family (publication)

EP 0369131 A2 19900523; EP 0369131 A3 19910109; EP 0369131 B1 19930512; AT E89378 T1 19930515; BR 8905835 A 19900612; DE 3838996 A1 19900523; DE 3838996 C2 19930708; DE 58904342 D1 19930617; ES 2040428 T3 19931016; JP H02180385 A 19900713; JP H0579859 B2 19931105; MX 171587 B 19931108

DOCDB simple family (application)

EP 89116819 A 19890912; AT 89116819 T 19890912; BR 8905835 A 19891120; DE 3838996 A 19881118; DE 58904342 T 19890912; ES 89116819 T 19890912; JP 29943589 A 19891117; MX 1799689 A 19891017